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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/037,669

01/03/2002

Mark T. Feuertraeter

42390P11856

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8791 7590 06/27/2008

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EXAMINER

NGUYEN, STEVEN H D

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

06/27/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/037,669	<b>Applicant(s)</b> FEUERSTRAETER ET AL.	
	<b>Examiner</b> STEVEN HD NGUYEN	<b>Art Unit</b> 2619	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 18 March 2008.

2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 37-57 is/are pending in the application.

    4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 37-57 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All    b) ☐ Some \*    c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 37-57 rejected under 35 U.S.C. 103(a) as being unpatentable over Williams in view Lee.

As claim 37, 41-43, 47-49 and 53-57, Williams discloses a method comprising receiving a plurality of Ethernet frames for transmission at a device, the device including an enhanced network interface (Fig 1, Ref 180); receiving a control message from a first Ethernet switch, the first Ethernet switch including the enhanced network interface, the control message identifying a priority level from among a plurality of priority levels for transmissions to the first Ethernet switch (Fig 5, Ref 550); identifying one or more of the plurality of Ethernet frames to be transmitted to the first network switch and determining the identified priority level for the first Ethernet switch for controlling the congestion (Fig 5, Ref 560 and 570) and a flow control agent for monitoring Ethernet traffic (Fig 2, Ref 225). However, Williams fails to disclose based on the identified priority level, pausing transmission to the first Ethernet switch of Ethernet frames that are associated with priority levels that are lower than the identified priority level and allowing transmission to the first Ethernet switch of Ethernet frames that are at or above the identified priority level. In the same field of endeavor, Lee discloses based on the identified priority level, pausing transmission to the first Ethernet switch of Ethernet frames that are

associated with priority levels that are lower than the identified priority level and allowing transmission to the first Ethernet switch of Ethernet frames that are at or above the identified priority level (Fig 9-10 wherein Fig 10 is used to send a feedback message included a priority level, Fig 9 discloses which priority levels of the packets can be transmitting to the next node such as at or above the feedback priority level); timing period for resuming transmission the paused packets and receiving a second control message, and, in response to the second control message, extending the pausing of transmission to the first Ethernet switch of Ethernet frames associated with priority levels that are lower than the identified priority level (Col. 6, lines 1-25) and a link to a second Ethernet switch that is not compatible with the enhanced network interface, wherein the system is to operate in conjunction with the second Ethernet switch without regard to the priority level of Ethernet frames (Fig 5, a link is fiber link).

Since, Lee suggests a method and system for controlling congesting in Ethernet network, involves transmitting only packets having priority level equal to or greater than feedback value, from sending node to receiving node. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for transmitting only packets having priority level equal to or greater than feedback value as disclosed by Lee into the teaching of Williams. The motivation would have been to prevent deadlock and livelocks.

As claims 38, 44 and 50, Williams discloses monitoring a plurality of queues to buffer Ethernet frames, each queue associated with a different priority level, wherein the monitoring is performed at the Ethernet switch (Fig 6).

As claims 39-40, 45-46 and 51-52, Williams discloses comparing a level of use of each of the plurality of queues with a threshold relating to queue capacity for the transmission of Ethernet frames; based on the comparing, identifying the priority level associated with a queue; and generating the control message identifying the priority level and communicating the control message to trigger the pausing of the transmission of Ethernet frames (Fig 5). However, Williams fails to disclose using thresholds to determine the available space to be used to receive the frames for a buffer and generating a pause message include the priority level for triggering a stop wherein the priority level represent a priority level for which the plurality of queues have reach threshold. In the same field of endeavor, Lee discloses a method for using thresholds to determine the available space to be used to receive the frames for a buffer and generating a pause message include the priority level for triggering a stop wherein the priority level represent a priority level for which the plurality of queues have reach threshold (Figs 9-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system as discloses by Lee into the teaching of Williams. The motivation would have been to prevent data lost.

3. Claim 58 rejected under 35 U.S.C. 103(a) as being unpatentable over Williams and Lee as applied to claim 43 above, and further in view of Krishna (USP 6981054).

Williams and Lee fail to disclose management data structure including a plurality of destination identifier entries and a priority entry for each of the destination identifier entries, the system to utilize the management data structure to identify the priority level for the first Ethernet switch (Fig 2, Ref 40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a table which has the destination and priority as disclosed by Krishna into the teaching of Williams and Lee.

### ***Response to Arguments***

4. Applicant's arguments filed 3/18/2008 have been fully considered but they are not persuasive.
5. The applicant states that Williams and Lee do not disclose the claimed invention. In reply, Williams discloses a method and system for monitoring traffic and identifying what priority causes a congestion by comparing threshold with the use of queues. Then, the switch will generate a pause includes priority level. The interface use priority level to control transmission of the frame from one place to another. Lee disclose a method and system for monitoring traffic and identifying what priority causes a congestion by comparing threshold with the use of queues. Then, the switch will generate a pause includes priority level and time as stated in the previous office actions and this final office action.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN HD NGUYEN whose telephone number is (571)272-3159. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/STEVEN HD NGUYEN/  
Acting SPE of Art Unit 2619/2600

